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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,679	08/29/2003	Brent D. Massmann	MTC 6828.1 (39-21 (52749)	2560
321	7590	09/06/2006	EXAMINER	
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			CLARDY, S	
			ART UNIT	PAPER NUMBER
			1617	

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/652,679	MASSMANN ET AL.	
	Examiner	Art Unit	
	S. Mark Clardy	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 1-33 are pending in this application, and are drawn to methods of making Na-glyphosate compositions by exothermically batch (claims 1-18) or continuously (claims 19-33) reacting particulate glyphosate acid, NaOH, and water, to make a Na-glyphosate paste with a final Na-glyphosate paste moisture content of about 2% to about 20%.

There was no PTO Form 892 to be provided with the previous office action; the box on the cover sheet was inadvertently checked.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-33 are again rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-44 of U.S. Patent No. 6,605,568, or claims 1-127 of U.S. Patent No. 6,734,142, further in view of Chin et al (US 5,070,197).

The prior patents each disclose methods of making ammonium glyphosate paste compositions which are equivalent to those claimed herein, with the obvious substitution of sodium

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hydroxide for the ammonium hydroxide of the prior patents. Chin et al (discussed further below) discloses the equivalence of such a substitution in making glyphosate compositions.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Massmann et al (WO 01/08492), Chin et al, and Kramer et al (US 5,614,468).

Massmann et al, cited by applicants as being the earlier international equivalent of U.S. Patent No. 6,605,568, teaches a batch or continuous process for making a downstream processable ammonium glyphosate paste. The final moisture content is 5% to about 20% (claim 1). The method differs from the that claimed herein in reacting glyphosate acid with ammonia (anhydrous gaseous ammonia, liquid ammonium hydroxide, or aqueous ammonia), rather than sodium hydroxide.

Chin et al teach a dry reactive process for preparation of a pesticidal salt in a continuous process in which the pesticidal acid is reacted with a base under exothermic (col 3, lines 56-60) reaction conditions with minimal solvent in an extruder (abstract). Glyphosate is listed among the pesticidal agents (col 2, line 46). Both ammonia and NaOH are recited in the list of possible bases, with NaOH among the most preferred bases for making the salt (col 3, lines 26-39). The bases are preferably solids, liquids or solids dissolved in water at high concentrations, i.e., 50-95% (lines 46-49). The final residual moisture content is no greater than about 10% (claim 1).

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One of ordinary skill in the art would be motivated to substitute the ammonium base of Massmann et al with the sodium hydroxide of Chin et al because Chin et al prefers NaOH.

Kramer et al teach a continuous process of reacting ammonium hydroxide with glyphosate acid in an exothermic process to make the ammonium salt of glyphosate with low moisture content (abstract). The moisture content is reduced during the process down to about 2% (col 6, lines 24-29).

One of ordinary skill in the art would be motivated to combine these references in order to use the metal salt reaction processes of Chin in the continuous process of Kramer et al or Massmann et al.

Thus it would have been *prima facie* obvious to the ordinary artisan at the time the invention was made to have made Na-glyphosate compositions by exothermic reaction of glyphosate acid, NaOH, and water, to make a Na-glyphosate paste with a low moisture content because the prior art teaches that exothermic processes of reacting glyphosate acid with bases such as ammonia or sodium hydroxide were known. The moisture contents as disclosed by Chin et al (10% or less), Kramer et al (2%), and Massmann et al (5% to 20%) overlap the moisture content as claimed herein (2% to 20%).

No unobvious or unexpected results are noted; no claim is allowed.

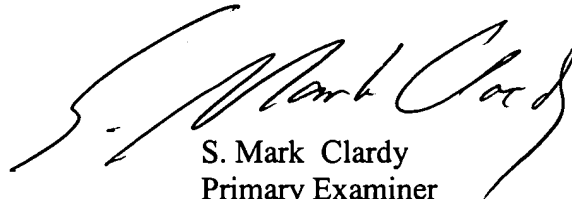
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 571-272-0611. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



S. Mark Clardy
Primary Examiner
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August 30, 2006